

ABSTRACT

MITOCHONDRIAL DNA VARIATION OF TURKISH *Testudo* COMPLEX

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The spur-thighed tortoise, *Testudo graeca*, has recently been split into a complex of species. Since this group is conservation concern due to trade and habitat destruction accurate understanding of evolutionary lineages in this taxon is important for guiding conservation strategies. We have sequenced rapidly evolving two mitochondrial markers (*ND4* and *Cyt b*) for 205 specimens from 100 different localities representing morphologically defined taxa in Turkey. Furthermore, we have added GenBank sequences of previous studies to place the Turkish *Testudo* into a broader regional phylogenetic framework. Our data showed inconsistencies between morphological and molecular groupings and supported the previous results. Six major clades (A-F) were identified four of which were from Turkey (*ibera*, *terrestris*, *buxtoni* and *armeniaca*). Recently described taxa *Testudo graeca anamurensis* and *Testudo antakyensis* were found genetically identical to *Testudo graeca terrestris*. The existences of *buxtoni* clade in Turkey was reported for the first time. Furthermore, possible contact zones of clades were also identified.

Key words: Chelonia, Testudinidae, *Testudo*, Phylogeny, Turkey